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Making Technological Entrepreneurship Successful in NM: The MOT program at ASM

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MOT Program

1. Mission

2. Courses

3. Philosophy and Style

4. Integration with Technology Community



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Mission

The mission of the MOT program is to engage in educational, research and technology commercialization activities and to remain one of the premier MOT programs in the world.



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Courses

Core course required of all MBA students:

MGT 511 Managing Technology in Competitive Markets

Other courses:

MGT 512 Strategic Management of Technology

MGT 513 Technological Forecasting and Assessment

MGT 515 Innovative Product Development

MGT 518 Project Management

MGT 519 Project in Technology Commercialization



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Courses

MGT 514 Technological Entrepreneurship

Building a business plan for a high-technology startup by examining:

- management plan**
- financial plan**
- marketing plan**
- production plan**
- strategic direction**



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Courses

MGT 516 Sources of Capital for Technology-based Companies

- **Strategic Alliances and Consortia**
 - types
 - formation issues
 - implementation issues
- **Venture Capital**
 - sources
 - requirements



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Philosophy and Style

- 1. Emphasis on a clinical approach: all our concentration courses have projects dealing with a real company and a real idea**
- 2. Strong link to the technology base in New Mexico: we win when you win.**
- 3. Knowledge of technology areas beyond the casual observation**



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Faculty

- **Sul Kassicieh**
- **Steve Walsh**
- **A number of experts from the technology community:
Vic Berniklau, Mark Allen , Carol Sumpter,
George Friberg among many others**
- **Call me if you have the time and interest**



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Success measures

- **Number of companies supported in entrepreneurial startup**
- **Number of students placed in technology organizations**
- **Number of projects for students and faculty**
- **Funded grants and contracts**
- **Publications in academic and practitioner journals**



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How can we make you successful?

- **Technology assessment for the New Ventures Program at Sandia : MODE, Wavefront, etc. that received VC funding**
- **Technology assessment and business development for WERC: Immunosensors and Activated Carbon that received seed capital for further development**
- **Technology assessment and business development for STC @ UNM**



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How can we make you successful?

- **Business Plans for a number of high technology startups: Management Sciences, Willow Systems, SiNaF and many others that are in process of deciding on taking the entrepreneurial plunge**
- **Work with Sandia on strategic business development in MEMS, Optoelectronics and Ceramics**
- **Work with JPL, Lucent on R&D management issues**
- **Developing business plans for e-commerce startups**



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How can we make you successful?

- **Graduates placed at Sandia, Los Alamos, Andersen Consulting, IBM, Intel, etc.**
- **Funding for grants and contracts of \$300,000 over last 3 years**
- **Excellent feedback from the business and academic community**
- **A number of publications in academic and practitioner journals**



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How can we make you successful?

- In the technological entrepreneurship course, we are building business plans for 14 New Mexico high technology startups.
- Commercialization of Disruptive Technologies contract with Sandia
- Commercialization of MEMS Conference (September 1998) : 200+ attendees
- MOT expert panel on Aerospace Industry: 150 attendees



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How can we make you successful?

- **IEEE Engineering Management Society Conference organization: conference dates August 13-15, 2000**
- **Planning for Commercialization of MEMS conference in September 2000 sponsored by Sandia and UNM**
- **contract with General Atomics for Russian tech startups**
- **continued work with many organizations**



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To increase success for NM Entrepreneurs

- **management expertise needed to start new high technology companies**
- **Students (with some funding to survive), faculty (with no funding) and some seasoned management expertise (with no funding) collaborate to become the “surrogate” entrepreneurs to take some innovations to commercialization.**
- **Graduating students are “next generation” of seasoned experts who will help others with starting new ventures**



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Benefits

- **Students: learn on the job with faculty and experienced managers, Payoff to students later as company succeeds**
- **Faculty and Managers: opportunities for research and accomplishment of clinical approach; benefits as companies succeed**
- **Less startup funding needed for new company**
- **More commercialization activities possible**



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Benefits

- **Technology community benefits from development of new management talent**
- **Technology community benefits from technologists developing more innovations that are commercialized**
- **More companies (and more jobs) created for community**